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EXAMINER
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DEBROW, JAMES J

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/976,302	<b>Applicant(s)</b> LAUGHLIN, JOHN DAVID	
	<b>Examiner</b> James J. Debrow	<b>Art Unit</b> 2176	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-5, 11, 12, 18, 19 and 22-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5, 11, 12, 18, 19, 22-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. This action is responsive to communications: After-Final Amendments filed 31 Aug. 2005.
2. Claims 2-5, 11, 12, 18, 19, 22-33 are pending in the case. Claims 2, 11, 18, 25, 32 and 33 are independent claims.

***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 31 Aug. 2005 has been entered.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 2-5, 11, 12, 18, 19, 25-27, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naik et al. (hereinafter "Naik") (Patent No.: US 5,579,446, Date of Patent: Nov. 26, 1996) in view of Keronen (Patent No.: US 6,559,968 B1, Filing Date Jun. 16, 1999).**

**Regarding independent claim 2**, Naik discloses *an interface configured to receive print job data in fig. 1. Naik discloses a print job formatting routine which notes one or more regions within a print job derived from the print job data and further specifies a particular print quality level at which each such region is then printed in fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16.*

Naik does not disclose expressly *a WYSIWYG display routine for generating a WYSIWYG display of the print job;*

*and a user input routine for receiving user input defining the one or more regions within the print job using the WYSIWYG display, wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level,*

*said regions including or excluding any particular element or elements of said print job as desired by the user.*

However, Keronen teaches a WYSIWYG display routine for generating a WYSIWYG display of the print job (column 6, lines 50-54 Keronen teaches the document to be printed can be displayed in a WYSIWYG display.);

*and a user input routine for receiving user input defining the one or more regions within the print job using the WYSIWYG display, wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by the user* (column 6, lines 35-64; 306 Fig. 3; 508 & 510, Fig. 5; Keronen teaches that in the WYSIWYG display, the user can select/define different regions within the document that is to be printed).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the print driver, disclosed in Naik, *wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level* for the benefit of selecting one or more regions of the displayed document for printing, as taught by Keronen (column 2, lines 37-44).

**Regarding dependent claim 3**, Naik discloses an *input routine configured to receive user input specifying a particular print quality level for each of the one or more regions defined within the print job* in fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, col. 6 line 61 – col. 7 line 16, and col. 10 lines 44-57.

**Regarding dependent claim 4**, Naik discloses *receiving user input routine configured to receive user input through a mouse connected to a host computer on which the printer driver is running* in fig. 1.

**Regarding dependent claim 5**, Naik does not disclose expressly *wherein the user input routine is configured to display movement of a cursor on the WYSIWYG display in response to physical movement of the mouse, the movement of the cursor being used by the user input routine to define the one or more regions within the print job*.

However, Keronen teaches *wherein the user input routine is configured to display movement of a cursor on the WYSIWYG display in response to physical movement of the mouse, the movement of the cursor being used by the user input routine to define the one or more regions within the print job* (column 6, lines 41-44; It has been established and is well known in the art that within the WYSIWYG display, the user typically moves the cursor to select different region/objects of the displayed document).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the color inkjet system (Figs. 1 and 3), disclosed in Naik, to include a WYSIWYG display, for the benefit of the user input routine configured to display movement of a cursor on the WYSIWYG display in response to physical movement of the mouse.

**Regarding independent claim 11**, Naik discloses *a method of printing documents comprising printing designated regions within a print job at different print quality levels*, said method further comprising (fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6, line 61 – col. 7 line 16):

Naik does not disclose expressly *displaying a WYSIWYG display of the print job; and*

*receiving user input defining the one or more regions within the print job using the WYSIWYG display, wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user.*

However, Keronen teaches *displaying a WYSIWYG display of the print job* (column 6, lines 50-54 Keronen teaches the document to be printed can be displayed in a WYSIWYG display.);

*receiving user input defining the one or more regions within the print job using the WYSIWYG display, wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user* (column 6, lines 35-64; 306 Fig. 3; 508 & 510, Fig. 5; Keronen teaches that in the WYSIWYG display, the user can select/define different regions within the document that is to be printed).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the print driver, disclosed in Naik, *wherein the user input can selectively define*

*any portion of said print job as a said region with a specified print quality level for the benefit of selecting one or more regions of the displayed document for printing, as taught by Keronen (column 2, lines 37-44).*

**Regarding dependent claim 12**, Naik does not disclose expressly *the method of claim 11, further comprising specifying said one or more regions within a print job by moving a courser driven by a mouse over said WYSIWYG display.*

However, Keronen teaches *the method of claim 11, further comprising specifying said one or more regions within a print job by moving a courser driven by a mouse over said WYSIWYG display* (column 6, lines 41-44; It has been established and is well known in the art that within the WYSIWYG display, the user typically moves the cursor to select different region/objects of the displayed document).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the color inkjet system (Figs. 1 and 3), disclosed in Naik, to include a WYSIWYG display, for the benefit of the user input routine configured to display movement of a cursor on the WYSIWYG display in response to physical movement of the mouse.

**Regarding independent claim 18**, Naik discloses a computer system comprising:

*a host computer (45 Fig. 1);*

*an interface on said host computer for connecting a printing device to said host computer (Fig. 1); and*



*a printer driver stored on said host computer for formatting print job data from said host computer to a printing device; wherein said printer driver comprises a print job formatting routine which notes one or more regions within a print job derived from print job data and further specifies a particular print quality level at which each such region is to be printed (2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16); and*

Naik does not disclose expressly wherein said print driver further comprises:

*a WYSIWYG display routine for generating a WYSIWYG display of the print job; and a user input routine for receiving user input defining said one or more regions within the print job using the WYSIWYG display, wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user.*

However, Keronen teaches a WYSIWYG display routine for generating a WYSIWYG display of the print job; and a user input routine for receiving user input defining said one or more regions within the print job using the WYSIWYG display, wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user (column 6, lines 50-54; column 6, lines 35-64; 306 Fig. 3; 508 & 510, Fig. 5; Keronen teaches that in the WYSIWYG display, the user can select/define different regions within the document that is to be printed).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the print driver, disclosed in Naik, *wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level* for the benefit of selecting one or more regions of the displayed document for printing, as taught by Keronen (column 2, lines 37-44).

**Regarding dependent claim 19**, Naik discloses *wherein the user input routine is configured to receive user input specifying a particular print quality level for each of the one or more regions defined within the print job* (Fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, col. 6 line 61 – col. 7 line 16, and col. 10 lines 44-57).

**Regarding independent claim 25**, Naik discloses *a printer driver stored on a computer-readable medium comprising:*

*an interface configured to receive print job data* (Fig. 1);  
*a user interface with which a user designates one or more specific region of a print job represented by said print job data* (Fig. 2-3, 5, 7, col. 5, lines 23-33, col. 5, lines 58-65, and col. 6, line 61 – col. 7, line 16.); and  
*a print job formatting routine which notes said one or more regions within said print job and further specifies a particular print quality level at which each such region is then printed* (2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16);

Naik does not disclose expressly *wherein user input through said user interface can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user.*

However, Keronen teaches *wherein user input through said user interface can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user* (column 6, lines 35-64; 306 Fig. 3; 508 & 510, Fig. 5; Keronen teaches that in the WYSIWYG display, the user can select/define different regions within the document that is to be printed).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the print driver, disclosed in Naik, *wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level* for the benefit of selecting one or more regions of the displayed document for printing, as taught by Keronen (column 2, lines 37-44).

**Regarding dependent claim 26,** Naik does not disclose expressly *the printer driver of claim 25, wherein said user interface comprises a WYSIWYG display of said print job.*

However, Keronen teaches *the printer driver of claim 25, wherein said user interface comprises a WYSIWYG display of said print job.* (col. 6 lines, 50-54; Keronen teaches the document to be printed can be displayed in a WYSIWYG display).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the print driver, disclosed in Naik, *user interface comprises a WYSIWYG display wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level* for the benefit of selecting one or more regions of the displayed document for printing, as taught by Keronen (column 2, lines 37-44).

**Regarding dependent claim 27**, Naik discloses *the printer driver of claim 25, wherein said interface comprises a mouse moving a cursor on a display of said print job, wherein clicking and dragging said cursor on said display designates a region of said print job* (Figs. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16. The user can manipulate the text, graphics, and photo image regions of the document using the mouse cursor.);

**Regarding dependent claim 29**, Naik teaches *wherein the print job formatting routine prompts a user to input a print quality level setting for at least one of the regions* in fig. 2 and 5.

**Regarding dependent claim 30**, Naik teaches *wherein the print job formatting routine prompts a user to input a print quality level setting for at least one of the regions* in fig. 2 and 5.

**Regarding dependent claim 31**, Naik teaches *wherein the print job formatting routine prompts a user to input a print quality level setting for at least one of the regions in fig. 2 and 5.*

**Regarding independent claim 32**, Naik discloses *a printer driver stored on a computer-readable medium comprising:*

*an interface configured to receive print job data (Fig. 1)*

*a print job formatting routine which notes said one or more regions within said print job derived from said print job and further specifies a particular print quality level at which each such region is then printed (Fig. 2-3, 5, 7; col. 5, lines 23-33; col. 5, lines 58-65, and col. 6, line 61 – col. 7, line 16);*

*Naik does not disclose expressly a display routine for generating a display of said print job; and*

*a user input routine for receiving user input defining said one or more regions within said print job using said display, wherein user input through said user interface can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user.*

However, Keronen teaches *a display routine for generating a display of said print job; and (column 6, lines 50-54 Keronen teaches the document to be printed can be displayed in a WYSIWYG display);*

*a user input routine for receiving user input defining said one or more regions within said print job using said display, wherein user input through said user interface can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user* (column 6, lines 35-64; 306 Fig. 3; 508 & 510, Fig. 5; Keronen teaches that in the WYSIWYG display, the user can select/define different regions within the document that is to be printed).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the print driver, disclosed in Naik, *wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level* for the benefit of selecting one or more regions of the displayed document for printing, as taught by Keronen (column 2, lines 37-44).

**Regarding independent claim 33**, Naik discloses a method of printing documents comprising printing designated regions within a print job at different print quality levels, said method further comprising (Fig. 2-3, 5, 7; col. 5, lines 23-33; col. 5, lines 58-65, and col. 6, line 61 – col. 7, line 16):

Naik does not disclose expressly *displaying a display of said print job; and receiving user input defining one or more regions within said print job using said display, wherein user input can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user.*

However, Keronen teaches *displaying a display of said print job*; (column 6, lines 50-54 Keronen teaches the document to be printed can be displayed in a WYSIWYG display); and

*receiving user input defining one or more regions within said print job using said display, wherein user input can selectively define any portion of said print job as a said region with a specified print quality level, said regions including or excluding any particular element or elements of said print job as desired by a user* (column 6, lines 35-64; 306 Fig. 3; 508 & 510, Fig.5; Keronen teaches that in the WYSIWYG display, the user can select/define different regions within the document that is to be printed.

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the print driver, disclosed in Naik, *wherein the user input can selectively define any portion of said print job as a said region with a specified print quality level* for the benefit of selecting one or more regions of the displayed document for printing, as taught by Keronen (column 2, lines 37-44).

6. **Claims 22, 23, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naik et al. (hereinafter “Naik”) (Patent No.: US 5,579,446, Patent of Date: Nov. 26, 1996) in view of Keronen (Patent No.: US 6,559,968 B1, Filing Date Jun. 16, 1999), further in view of Nicoloff, Jr. et al. (hereinafter “Nicoloff”) (Patent No.: US 6,017,113, Patent of Date: Jan. 25, 2000).**

**Regarding dependent claim 22**, Naik discloses defining variable print quality for a plurality of regions in a document in fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16.

Naik in view of Keronen does not disclose expressly *the print quality level is defined by pixels per unit distance*.

However, Nicoloff does teach a printer capable of mixed print quality wherein *print quality is defined by pixels per distance* in col. 2 line 41 – col. 3 line 26. It would have been obvious to one of ordinary skill to have combined the teachings of Naik in view of Keronen with Nicoloff to have created the claimed invention. It would have been obvious and desirable to have printed different regions at different resolutions because the different types of regions, such as monochrome versus color portions, in a document have different resolution requirements as taught by Nicoloff in col. 3 lines 17-26.



**Regarding dependent claim 23**, Naik teaches defining variable print quality for a plurality of regions in a document in fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16.

Naik in view of Keronen does not teach that *the print quality level is defined by pixels per unit distance*.

However, Nicoloff does teach a printer capable of mixed print quality *wherein print quality is defined by pixels per distance* in col. 2 line 41 – col. 3 line 26. It would have been obvious to one of ordinary skill to have combined the teachings of Naik in view of Keronen with Nicoloff to have created the claimed invention. It would have been obvious and desirable to have printed different regions at different resolutions because the different types of regions, such as monochrome versus color portions, in a document have different resolution requirements as taught by Nicoloff in col. 3 lines 17-26.

**Regarding dependent claim 24**, Naik teaches defining variable print quality for a plurality of regions in a document in fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16.

Naik in view of Keronen does not teach that *the print quality level is defined by pixels per unit distance*.

However, Nicoloff does teach a printer capable of mixed print quality *wherein print quality is defined by pixels per distance* in col. 2 line 41 – col. 3 line 26. It would have been obvious to one of ordinary skill to have combined the teachings of Naik in view of Keronen with Nicoloff to have created the claimed invention. It would have been

obvious and desirable to have printed different regions at different resolutions because the different types of regions, such as monochrome versus color portions, in a document have different resolution requirements as taught by Nicoloff in col. 3 lines 17-26.

**Regarding dependent claim 28**, Naik discloses defining variable print quality for a plurality of regions in a document in fig. 2-3, 5, 7, col. 5 lines 23-33, col. 5 lines 58-65, and col. 6 line 61 – col. 7 line 16.

Naik in view of Keronen does not disclose expressly *the print quality level is defined by pixels per unit distance*.

However, Nicoloff does teach a printer capable of mixed print quality *wherein print quality is defined by pixels per distance* in col. 2 line 41 – col. 3 line 26. It would have been obvious to one of ordinary skill to have combined the teachings of Naik in view of Keronen with Nicoloff to have created the claimed invention. It would have been obvious and desirable to have printed different regions at different resolutions because the different types of regions, such as monochrome versus color portions, in a document have different resolution requirements as taught by Nicoloff in col. 3 lines 17-26.

***Response to Arguments***

7. Applicant's arguments filed 31 Aug 2005 have been fully considered but they are not persuasive.

Applicant's arguments with respect to independent claims 2, 11, 18, 25, 32 and 33, along with their respective dependent claims have been considered but are moot in view of the new ground(s) of rejection. New ground(s) of rejection are based on newly found prior art reference(s) of Keronen. An explanation of the rejection is given.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Debrow whose telephone number is 571-272-5768. The examiner can normally be reached on 8:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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